

Econ 3010 – Intermediate Microeconomics

Who

Professor: Alejandro Molnar (alejandro.i.molnar@vanderbilt.edu)

TA: Bing Yang Tan (bing.yang.tan@vanderbilt.edu)

Where and when

Lecture

Tue and Thu, 9.35 am to 10.50 am, Stevenson #5, Room 211

Office hours

Prof.: Drop in: Tuesday from 8.30 am to 9.30 am.

(In lecture room, backup option is Stevenson #2 1115)

By appointment: Wednesday from 2 to 3.30 pm. Calhoun 310

Book appointment at alejandro.youcanbook.me

TA: Monday from 3 to 4.30 pm. Stevenson #2 1115

Friday from 10 to 11.30 am. Stevenson #2 1115

Basic calculus review. Two alternative sessions during the first week of class:

i) 5.30 to 6.30 pm, Tue Jan 9. Calhoun 209

ii) 5 to 6 pm, Wed Jan 10. Calhoun 209

Review notes posted at bit.ly/e3010

See alejandromolnar.org/teaching to sign-up for the class Google calendar.

Due dates

PS 1 due. Thu Jan 25.

PS 2 due. Tue Feb 6.

Midterm #1. Tue Feb 13.

PS 3 due. Thu Mar 1.

PS 4 due. Tue Mar 20.

Midterm #2. Tue Mar 27.

PS 5 due. Tue Apr 10.

PS 6 due. Thu Apr 19.

Final. Tue, May 1 at 9 am.

Lecture slides and problems sets: Will be posted at bit.ly/e3010

Note: Please complete the class survey at bit.ly/econ3010survey

Why

Econ 3010 is a cornerstone course for the Econ major: many courses later in the major build on knowledge and skills that you will develop in 3010, so effort in this class will pay off in later courses. The goals for the course are to:

1. Teach you microeconomic theory.
2. Make a lot of progress in teaching you how to “think like an economist” – a multiple course endeavor, but 3010 is a key course.
3. Learn how to work with mathematical models in economics.

These three are related, but not exactly the same. Microeconomic theory we can describe fairly well with the course description from the catalogue:

“Development of the techniques of analysis for problems of resource allocation. Theories of choice and production for individual economic agents in competitive and monopolistic environments. Behavior of markets. Determination of prices, wages, interest, rent, and profit. Income distribution. “

Micro theory is a set of models that you can use to help you think clearly about many social situations: the problems of resource allocation in a competitive market, as in the catalogue description, but also how allocation happens by and within government, within a corporation (corporations may participate in a free market but decisions within them are often made from the top down, and involve a large part of resource allocation in an economy), within a team, etc.

“Thinking like an economist” involves using and applying microeconomic theory. This traditionally was taken to mean the use of the ideas you saw in your intro econ class (opportunity cost, supply and demand), as well as the principle of thinking about how people and firms would act if following their self-interest to predict their behavior, and to predict how the behavior from multiple individuals in a given setting (such as a market) would work out.

I would argue that what it means to “think like an economist” is now broader. The above is still true, but the set of models used to think about the world has grown by a lot. Examples within micro theory include game theory and information economics, among others. Other models come from theory in macroeconomics (understanding expectations, credibility), and from how we test and “quantify” theories using data from social science (econometrics).¹ In addition to learning the microeconomic theory, I will try to provide some examples of how it applies to real world problems in business, public policy, etc.

¹ One challenge when analyzing data from people or firms is that it often comes from individuals making choices, for example on whether to be in a data sample! Micro theory can help think through those choices, and how they affect any empirical analysis.

Most microeconomic theory takes the form of mathematical models, and a key part of this course is learning to work with some of these models. The practice of working with mathematical models will help you in many other Econ courses. Developing more comfort with expressing some ideas mathematically, the main goal of which is to work through to the conclusions of your assumptions,² will help you more broadly.

How: rules and regulations

Problem sets can be solved in groups of up to three people. For everyone to get credit, names must be on the problem set when you hand it in – no after the fact additions.

No make-up or alternate final exams will be offered. The exam will be only on the assigned date during exam week. This is because it is impossible to produce two exams of equal difficulty, so offering them on two dates would be inherently unfair. It would also create excessive amount of work for the TA.

Attendance is not mandatory, but it is encouraged. I will provide lecture slides through a Dropbox page right before the class. The slides provide substantial detail so that you can rely on them, the notes you take in class, the problem sets and additional practice problems that I will provide as your main study material.

Book: the class is designed so that you can study from the lecture slides. However, I follow *“Intermediate Microeconomics”* by Hal Varian. You can use any recent edition; it does not need to be the latest one as they’re all very similar. When I refer to book chapters I’ll use their name rather than number so that you can keep track no matter what edition you buy. You can use the “with calculus” or the regular version, they’re actually very similar and the only difference is whether some of the calculus is placed in each chapter’s main text or in an appendix.

² Or, going in the other direction, to understand what assumptions underlie your conclusions.

How: grading

Your grade will come from applying a curve to the 'raw score' on your class assignments, weighted in this way:

Problem sets: 25%

Midterm #1: 20%

Midterm #2: 20%

Final: 30%

"Attendance and participation": 5%

There will be 6 problem sets, but only your top 5 scores will be used to compute a 'raw score' for the course. You can completely bomb or not even turn in one problem set without it hurting your grade. Don't plan not to turn in a problem set, however, as the allowance will come in handy if you need to miss a problem set for some other reason. Most importantly, the point of the problem sets isn't to test you but to serve as a tool and learning material. Microeconomic theory involves math and, as in a math class, you must practice on problems so that your understanding of the concepts can develop.

For each assignment (problem sets and exams), we'll provide solutions before returning the grades to you. We won't assign letter grades for each individual assignment, but after each midterm I'll provide you with an estimate of your "grade so far" and some statistics from all students so that you know how you're doing relative to your peers.

Policy on points for "attendance and participation": everyone will get full points for attendance unless I never or almost never see them in class, or if I see them being disruptive.³ There is no need to email me if you can't make a class here or there: lecture slides will be posted, and you can come to office hours for any questions.

Once the raw scores are weighted and summed up, as in most classes at Vanderbilt a grade will be assigned by means of a curve. So that you have an idea of what the curve looks like, the following were the grade distributions over the four semesters in which I've taught this course:

³ Students are almost always respectful and not disruptive. The main way that students can be disruptive, probably without realizing it, is when they use their computer for anything other than taking notes. I want to treat you like adults so you may use your computer to take notes, but please note that it is easy for me to tell what you're doing because the face on someone taking notes on Microeconomics is completely different to that of someone on facebook, buzzfeed, etc!

Letter grade	Spring 2014 (percent)	Fall 2014 (percent)	Fall 2015 (percent)	Spring 2016 (percent)
A	18.6	15.6	11.4	18.2
A-	15.7	12.4	18.2	15.2
B+	12.8	15.9	13.6	18.2
B	14.3	18.7	18.2	12.1
B-	11.5	18.7	15.9	15.2
C+	14.3	6.3	4.5	9.1
C	10.0	6.3	9.1	6.1
C-	2.8	6.3	6.8	3.0

Only one F was assigned in Spring 2014, and one D in each of Fall 2014, Fall 2015 and Spring 2016.

This semester the distribution of grades will be similar to those above; there may be a little bit more of one grade or another depending on how gaps develop in the distribution of raw scores.

How to ask for a re-grade

Please try to limit any requests for regrades to cases where you can make a clear, objective and well-argued appeal based on a provided solution: it is a waste of time to “take a chance” on asking for a regrade. Please be mindful of how objective your request for a regrade would be, as the TA grades partial credit relative to the solutions provided by your classmates, and you cannot observe these. Also, given that you’re assessed through six problem sets and three exams, a re-grade will almost never “move the needle” on your grade.

Although I ask you to please use your and our time wisely, I understand that grading errors may occur and you’ll have full recourse if that happens. There are two possible re-grade cases:

- i) You think there was a simple adding up problem, such that your points on the individual questions add up to more than the total raw points written on your solutions. In this case let the TA know about it by email or during office hours, and he will take care of making the change.
- ii) You think the score assigned to one or more of your questions should be higher, based on the provided solutions, your personal opinion, etc. In this case fill out the “re-grade request form” available at alejandromolnar.org/regraderequestform.pdf, and follow the instructions there. Please note that re-grade requests cause the professor to review all of the grading, and may have unexpected results on your score. You may have the points requested granted or not, and you may have points added or deducted on other questions.

Issues with grades must fall under the above two cases for a re-grade. If you're having a tough time or personal problems, you can talk to me about it: please do send me an email and we'll talk, but it cannot affect grading. Email about problems and grades only for truly exceptional circumstances that involve the Dean of Students and that prevent you from satisfying course requirements.

Please no funny business! Assignments will be graded in ink; and the TA will take photos for a random sample of them in case there are strange disputes about who wrote what.

What: course outline

Consumer theory
Competitive equilibrium
General equilibrium and welfare economics
Choice under uncertainty
Intro to cost-benefit analysis
Producer theory
Intro to game theory
Market power and monopoly
Information economics

Possible topics (we may cover a few)

Intro to finance/investment theory
Auctions
Antitrust
Externalities
Public goods

Other legal notices, etc.

On **religious holidays**. From the student handbook: *"It is the obligation of students to provide faculty with reasonable notice of the dates of religious holidays on which they will be absent, preferably at the beginning of the semester. Students who are absent on days of examinations or class assignments should be offered an opportunity to make up the work without penalty (if they have previously arranged to be absent), unless it can be demonstrated that a makeup opportunity would constitute an unreasonable burden on a member of the faculty. Should a disagreement arise over what constitutes an unreasonable*

burden or any element of this policy, parties involved should consult the department chair, or, in schools without department chairs, the dean of the school."

On illness and missing examinations. An examination can be omitted for a confirmed medical issue, and the remaining examinations will be re-weighted. Please obtain confirmation of a medical issue, either from the Dean's office or your medical practitioner, who can email me directly.

On athlete travel and problem sets or exams. Student athletes on University-sanctioned travel can turn in problem sets before travel, or on the due date by emailing the TA scans or high-quality photos of their problem set answers, and upon their return dropping off the written problem set in the TA mailbox (Economics grad student lounge, 4th floor of Calhoun Hall). The TA will grade based on these emailed scans or digital photos. Please provide early notice if you will be on University-sanctioned travel during a test date, in which case the test will be administered during travel by an academic counselor or Associate Director of Student Athletics (your coach cannot proctor a test).

On classroom recording. From the 2014-2015 student course manual: *"The use of technologies for audio and video recording of lectures and other classroom activities is allowed only with the express permission of the instructor. In cases where recordings are allowed, such content is restricted to personal use only unless permission is expressly granted in writing by the instructor and by other classroom participants, including other students. Personal use is defined as use by an individual student for the purpose of studying or completing course assignments. When students have permission for personal use of recordings, they must still obtain written permission from the instructor to share recordings with others."*